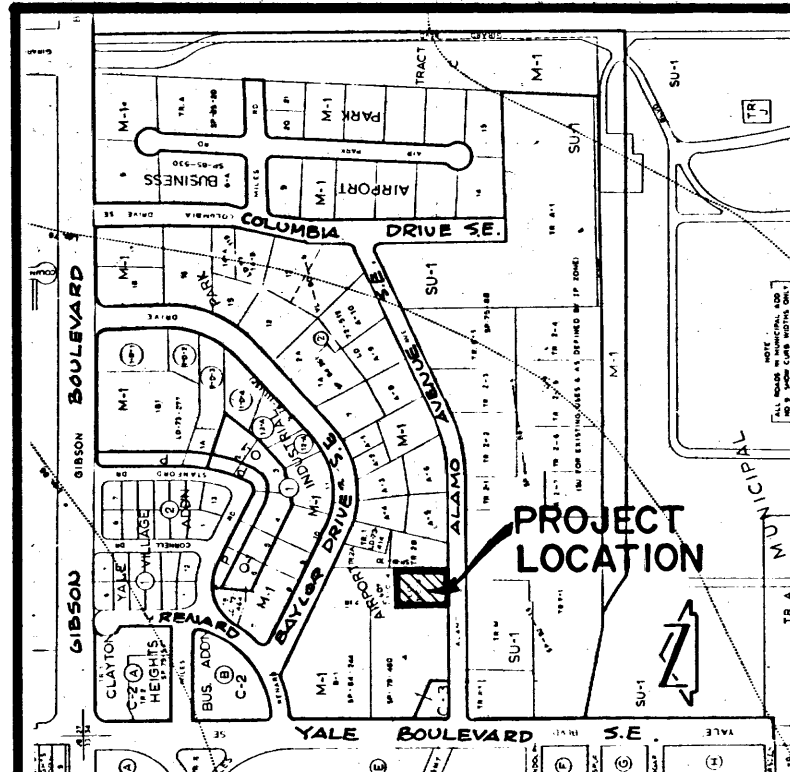




VICINITY MAP M-16
SCALE: 1" = 800'

Construction Notes:

- Two (2) working days prior to any excavation, contractor must contact New Mexico One Call Service, 260-1990, for location of existing utilities.
- Prior to construction, the contractor shall excavate and verify the horizontal and vertical location of all potential obstructions. Should a conflict exist, the contractor shall notify the engineer so that the conflict can be resolved with a minimum amount of delay.
- All work on this project shall be performed in accordance with applicable federal, state and local laws, rules and regulations concerning safety and health.
- All construction within public right-of-way shall be performed in accordance with applicable City of Albuquerque Standards and Procedures.
- If any utility lines, pipelines, or underground utility lines are shown on these drawings, they are shown in an approximate manner only, and such lines may exist where none are shown. If any such existing lines are shown, the location is based upon information provided by the owner of said utility, and the information may be incomplete, or may be obsolete by the time construction commences. The engineer has undertaken no field verification of the location, depth, size, or type of existing utility lines, pipelines, or underground utility lines, makes no representation pertaining thereto, and assumes no responsibility or liability therefor. The contractor shall inform itself of the location of any utility line, pipeline, or underground utility line in or near the area of the work in advance of and during excavation work. The contractor is fully responsible for any and all damage caused by its failure to locate, identify and preserve any and all existing utilities, pipelines, and underground utility lines. In planning and conducting excavation, the contractor shall comply with state statutes, municipal and local ordinances, rules and regulations, if any, pertaining to the location of these lines and facilities.
- The design of planters and landscaped areas is not part of this plan. All planters and landscaped areas adjacent to the building(s) shall be provided with positive drainage to avoid any ponding adjacent to the structure. For construction details, refer to landscaping plan.

Erosion Control Measures:

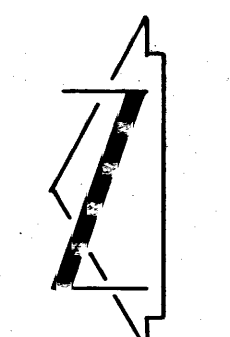
- The contractor shall ensure that no soil erodes from the site into public right-of-way or onto private property. This can be achieved by constructing temporary berms at the property lines and wetting the soil to keep it from blowing.
- The contractor shall promptly clean up any material excavated within the public right-of-way so that the excavated material is not susceptible to being washed down the street.
- The contractor shall secure "Topsoil Disturbance Permit" prior to beginning construction.

PROJECT BENCHMARK

THE STATION IS A 3/4" ALUMINUM TABLET SET FLUSH WITH THE CONCRETE PAVEMENT. THE STATION IS STAMPED "ACS, 1-M16, 1984". THE STATION IS LOCATED 2.7 MILES SOUTHEAST OF DOWNTOWN ALBUQUERQUE, IN THE INTERSECTION OF GIBSON BLVD. & YALE BLVD. TO REACH THE STATION FROM I-25, TRAVEL EAST ON GIBSON BLVD. 1 MILE.
ELEVATION = 5189.847 FEET (M.S.L.D.)

T.B.M.

T.B.M. #1 - TOP OF REBAR LOCATED AT THE NORTHEAST PROPERTY CORNER AS SHOWN ON THE DRAWING BELOW.
ELEVATION = 5125.22 FEET
T.B.M. #2 - TOP OF REBAR LOCATED AT THE NORTHWEST PROPERTY CORNER AS SHOWN ON THE DRAWING BELOW.
ELEVATION = 5117.86 FEET



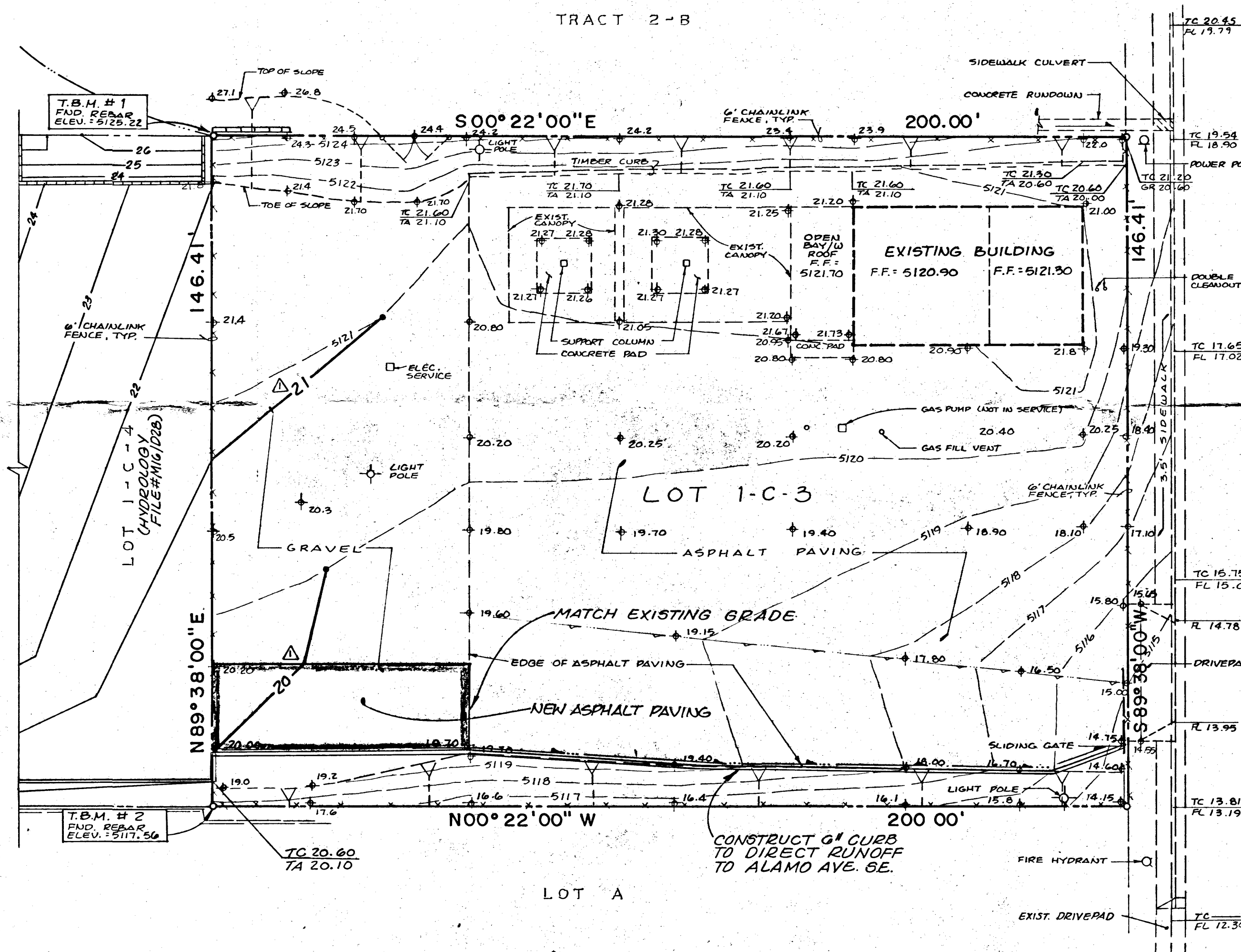
SCALE: 1" = 20'

LEGAL DESCRIPTION

LOT 1-C-3, BLOCK 2, AIRPORT INDUSTRIAL PARK

LEGEND

- +— EXISTING SPOT ELEVATION
- 5121— EXISTING CONTOUR
- V— EXISTING SLIDE SLOPE
- X— EXISTING CHAINLINK FENCE
- TC— TOP OF CURB
- TA— TOP OF ASPHALT
- FL— FLOWLINE
- GR— DIRECTION OF FLOW



ALAMO AVENUE S.E.

DRAINAGE PLAN

The following items concerning the Alamo Rent-A-Car Drainage Plan are contained hereon:

- Vicinity Map
- Grading Plan
- Calculations

As shown by the Vicinity Map, the site is located along the north side of Alamo Avenue S.E. east of the intersection with Yale Boulevard S.E. At present, the site is partially developed. An asphalt paving parking area, a 1500 square feet commercial building and two canopies currently fill much of the area of the lot.

As shown by Panel 35 of 50 of the National Flood Insurance Program Flood Boundary and Floodway Maps for the City of Albuquerque, New Mexico, this site does not lie within a designated flood hazard zone. This map also indicates that there is no downstream flooding within Yale Boulevard S.E. At present, the site drains from north to south onto Alamo Avenue S.E. Alamo Avenue S.E. drains east to west to a low point at the intersection with Yale Boulevard S.E. Storm inlets at this intersection accept street flows as demonstrated by the Albuquerque Master Drainage Study Plat M-16. The proposed improvements will not alter this existing drainage pattern.

The grading plan shows 1) existing and proposed grades indicated by spot elevations and contours, at 1'0" intervals, 2) the limit and character of the existing improvements, 3) the limit and character of the proposed improvements, and 4) the continuity between existing and proposed grades. As shown by this plan, this project consists of minor grading changes, additional asphalt paving and the construction of a 6" curb. These improvements are proposed to facilitate acceptance and conveyance of runoff generated on adjacent Lot 1-C-4 to Alamo Avenue S.E. The routing of runoff from Lot 1-C-4 through this lot will allow Lot 1-C-4, an infill lot, to be graded in a manner which conforms to adjacent lots and allows discharge of runoff by surface flow. The combined runoff from Lots 1-C-3 and 1-C-4 will be discharged into Alamo Avenue S.E. via the existing driveway. Alamo Avenue S.E. contains a public storm drain system which accepts runoff within the street and conveys that runoff to a downstream public drainage channel. This channel ultimately discharges to the A.M.A.F.C.A. South Diversion Channel.

The calculations which appear hereon analyze both the existing and developed conditions for the 100-year, 6-hour rainfall event. The peak discharge of runoff has been calculated using the Rational Method while the SCS Method has been used to quantify the volume of runoff generated. Both Methods have been used in accordance with the City of Albuquerque Development Process Manual, Volume II, coupled with the Mayor's Emergency Rule adopted January 14, 1986. Based upon the proximity of downstream improvements and negligible impact on downstream conditions, the free discharge of runoff as outlined above is appropriate.

Ground Cover Information

From SCS Bernalillo County Soil Survey, Plate 31: Cu - Cut and fill land
Hydrologic Soil Group: A
Existing Pervious CN = 54 (DPM Plate 22.2 C-2)
Pasture or Range Land: fair condition)
Developed Pervious CN = 54 (DPM Plate 22.2 C-2)

Time of Concentration/Time to Peak

$T_c = 0.0078 \cdot 10.77 / 0.385$ (Kirpich Equation)

$T_p = T_c = 10$ min.

Point Rainfall

$P_6 = 2.3$ in. (DPM Plate 22.2 D-1)

Rational Method

Discharge: $Q = C \cdot i \cdot A$

where C varies

$i = P_6 (6.84) T_c^{-0.51} = 4.85$ in/hr
 $P_6 = 2.3$ in (DPM Plate 22.2D-1)
 $T_c = 10$ min (minimum)
 $A =$ area, acres

SCS Method

Volume: $V = 3630$ (DRO) A

Where DRO = Direct runoff in inches
 $A =$ area, acres

Existing Condition

$A_{total} = 29,282$ sf = 0.67 Ac
Roof area = 3,050 sf (0.10)
Paved area = 15,945 sf (0.55)
Landscaped area = 10,287 sf (0.35)
 $C = 0.75$ (Weighted average per Emergency Rule, 1/14/86)
 $Q_{100} = C \cdot i \cdot A = 0.75 (4.86) (0.67) = 2.4$ cfs
 $A_{imp} = 18,995$ sf; % impervious = 65 %
Composite CN = 83 (DPM Plate 22.2 C-2)
DRO = 0.9 in (DPM Plate 22.2 C-4)
 $V_{100} = 3630$ (DRO) A = 2,190 cf

Developed Condition

$A_{total} = 29,282$ sf = 0.67 Ac
Roof area = 3,050 sf (0.10)
Paved area = 17,640 sf (0.61)
Landscaped area = 8,592 sf (0.29)
 $C = 0.79$ (Weighted average per Emergency Rule, 1/14/86)
 $Q_{100} = C \cdot i \cdot A = 0.79 (4.86) (0.67) = 2.6$ cfs
 $A_{imp} = 20,690$ sf; % impervious = 71 %
Composite CN = 84 (DPM Plate 22.2 C-2)
DRO = 0.95 in (DPM Plate 22.2 C-4)
 $V_{100} = 3630$ (DRO) A = 2,310 cf

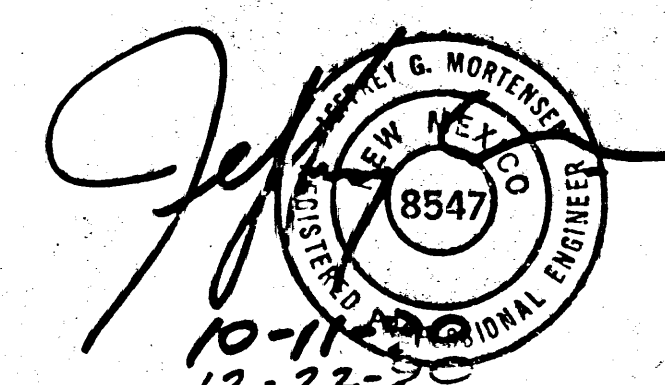
Comparison (Onsite Flows)

$\Delta Q_{100} = 2.6 - 2.4 = 0.2$ cfs
 $\Delta V_{100} = 2,310 - 2,190 = 120$ cf

Offsite Flows (See revised plan M16/D28)

$A_{total} = 26,770$ sf = 0.62 Ac
Roof area = 3,050 sf (0.10)
Paved area = 24,370 sf (0.91)
Landscaped area = 2,400 sf (0.09)
 $C = 0.89$ (Weighted average per Emergency Rule, 1/14/86)
 $Q_{100} = C \cdot i \cdot A = 0.89 (4.86) (0.62) = 2.7$ cfs

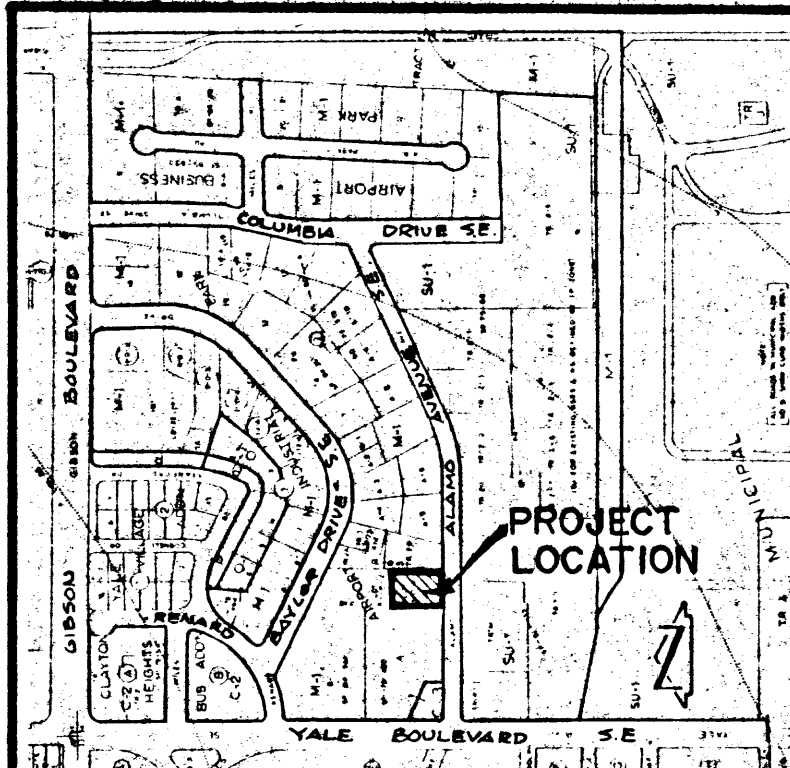
Combined Flows
Developed condition flows discharged into Alamo Avenue S.E.,
 $Q_{100} = 2.7 + 2.6 = 5.3$ cfs



Jeff Mortensen & Associates, Inc.
6010-B MIDWAY PARK BLVD. N.E.
ALBUQUERQUE, NEW MEXICO 87109
ENGINEERS (505) 345-4250

GRADING & DRAINAGE PLAN ALAMO RENT-A-CAR - ALAMO AVENUE S.E.

DESIGNED BY	NO.	DATE	BY	REVISIONS	JOB NO.
J.G.M.	1	12/90	JGH	REVISE PAVING LIMITS AND GRADES	900525
DRAWN BY					DATE
S.G.H.					9-1990
APPROVED BY					SHEET
J.G.M.					1 OF 1



VICINITY MAP
SCALE: 1" = 800'

Construction Notes:

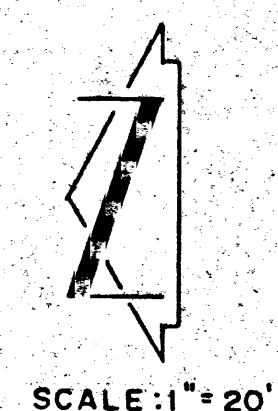
- Two (2) working days prior to any excavation, contractor must contact New Mexico One Call Service, 260-1990, for location of existing utilities.
- Prior to construction, the contractor shall excavate and verify the horizontal and vertical location of all potential obstructions. Should a conflict exist, the contractor shall notify the engineer so that the conflict can be resolved with a minimum amount of delay.
- All work on this project shall be performed in accordance with applicable federal, state and local rules and regulations concerning safety and health.
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- If any utility lines, pipelines, or underground utility lines are shown on these drawings, they are shown in an approximate manner only, and such lines may exist where none are shown. If any such existing lines are shown, the location is based upon information provided by the owner of said utility, and the information may be incomplete, or may be obsolete by the time construction commences. The engineer has undertaken no field verification of the location, depth, size, or type of existing utility lines, pipelines, or underground utility lines, makes no representation pertaining thereto, and assumes no responsibility or liability therefor. The contractor shall inform itself of the location of any utility line, pipeline, or underground utility line in or near the area of the work in advance of and during excavation work. The contractor is fully responsible for any and all damage caused by its failure to locate, identify and preserve any and all existing utilities, pipelines, and underground utility lines. In planning and conducting excavation, the contractor shall comply with state statutes municipal and local ordinances, rules and regulations, if any, pertaining to the location of these lines and facilities.
- The design of planters and landscaped areas is not part of this plan. All planters and landscaped areas adjacent to the building(s) shall be provided with positive drainage to avoid any ponding adjacent to the structure. For construction details, refer to landscaping plan.

Erosion Control Measures:

- The contractor shall ensure that no soil erodes from the site into public right-of-way or onto private property. This can be achieved by constructing temporary berms at the property lines and wetting the soil to keep it from blowing.
- The contractor shall promptly clean up any material excavated within the public right-of-way so that the excavated material is not susceptible to being washed down the street.
- The contractor shall secure "Topsoil Disturbance Permit" prior to beginning construction.

PROJECT BENCHMARK
THE STATION IS A 3/4" ALUMINUM TABLET SET FLUSH WITH THE CONCRETE PAVEMENT. THE STATION IS STAMPED "ACS, 1-M16, 1984." THE STATION IS LOCATED 2.7 MILES SOUTHEAST OF DOWNTOWN ALBUQUERQUE, IN THE INTERSECTION OF GIBSON BLVD. & YALE BLVD. TO REACH THE STATION FROM I-25, TRAVEL EAST ON GIBSON BLVD. 1 MILE.
ELEVATION = 5189.847 FEET (M.S.L.D.)

T.B.M.
T.B.M. #1 - TOP OF REBAR LOCATED AT THE NORTHEAST PROPERTY CORNER AS SHOWN ON THE DRAWING BELOW.
ELEVATION = 5125.22 FEET
T.B.M. #2 - TOP OF REBAR LOCATED AT THE NORTHWEST PROPERTY CORNER AS SHOWN ON THE DRAWING BELOW.
ELEVATION = 5117.56 FEET

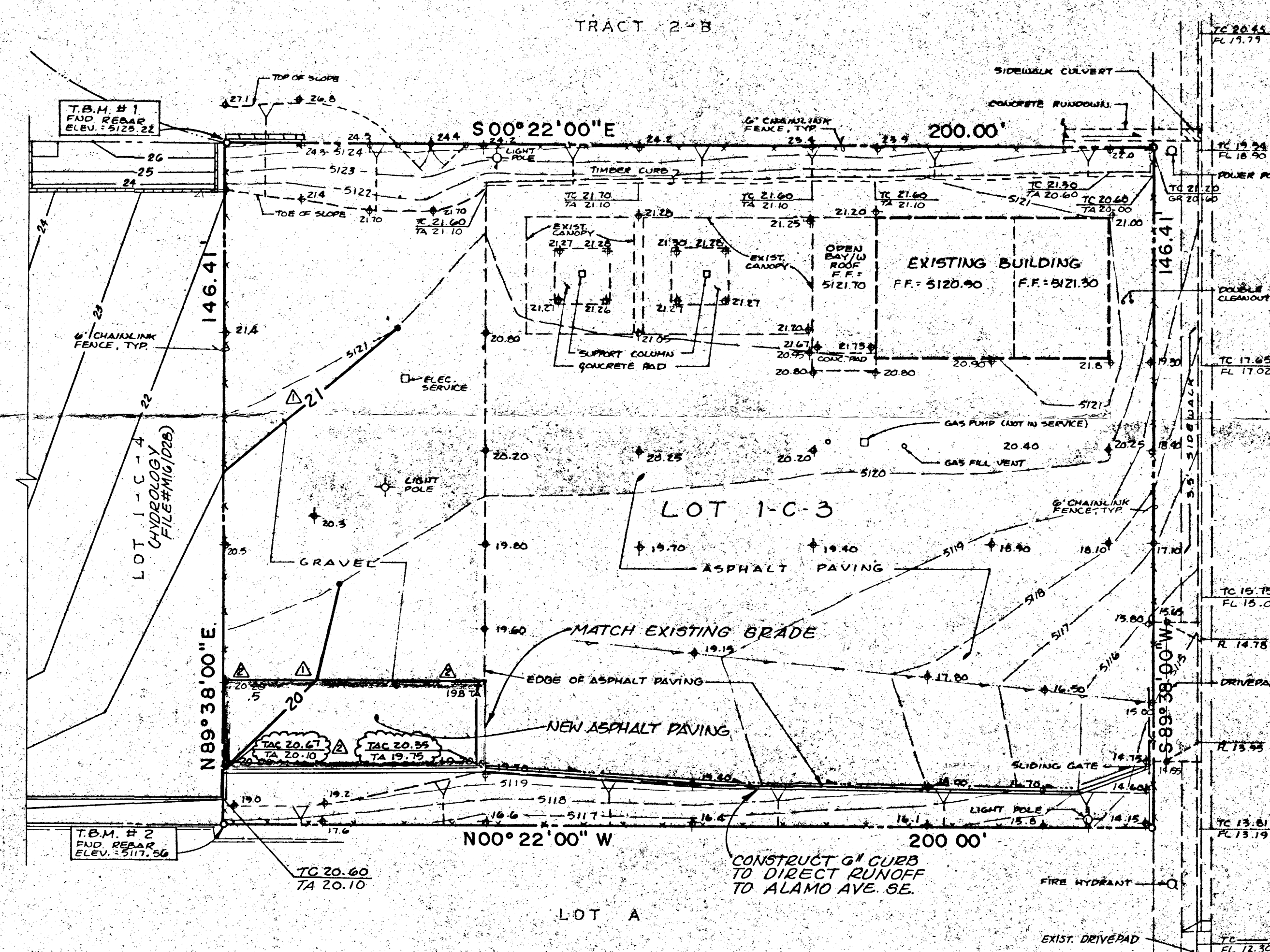


SCALE: 1" = 20'

LEGAL DESCRIPTION
LOT 1-C-3, BLOCK 2, AIRPORT INDUSTRIAL PARK

LEGEND

- EXISTING SPOT ELEVATION
- EXISTING CONTOUR
- EXISTING SLIDE SLOPE
- EXISTING CHAINLINK FENCE
- TOP OF CURB
- TOP OF ASPHALT FLOWLINE
- DIRECTION OF FLOW
- GROUND
- AS-BUILT ELEVATION
- AS-BUILT



ENGINEER'S CERTIFICATION
As indicated by the as-built elevations shown hereon, the subject project has been constructed in substantial compliance with the approved design.

Jeffrey G. Mortensen, N.M.P.E. No. 8547
Professional Engineer
Date: 01-29-91

The following items concerning the Alamo Rent-A-Car Drainage Plan are contained hereon:

- Vicinity Map
- Grading Plan
- Calculations

As shown by the vicinity map, the site is located along the north side of Alamo Avenue S.E. east of the intersection with Yale Boulevard S.E. At present, the site is partially developed. An asphalt paving parking area, a 1500 square feet commercial building and two canopies currently fill much of the area of the lot.

As shown by Panel 35 of 56 of the National Flood Insurance Program Flood Boundary and Floodway Maps for the City of Albuquerque, New Mexico, this site does not lie within a designated flood hazard zone. This map also indicates that there is no downstream flooding within Yale Boulevard S.E. At present, the site drains from north to south onto Alamo Avenue S.E. Alamo Avenue S.E. drains east to west to a low point at the intersection with Yale Boulevard S.E. Storm inlets at this intersection accept street flows as demonstrated by the Albuquerque Master Drainage Study Plat M-16. The proposed improvements will not alter this existing drainage pattern.

The grading plan shows 1) existing and proposed grades indicated by spot elevations and contours at 1'0" intervals, 2) the limit and character of the existing improvements, 3) the limit and character of the proposed improvements, and 4) the continuity between existing and proposed grades. As shown by this plan, this project consists of minor grading changes, additional asphalt paving and the construction of a 6" curb. These improvements are proposed to facilitate acceptance and conveyance of runoff generated on adjacent Lot 1-C-4 to Alamo Avenue S.E. The routing of runoff from Lot 1-C-4 through this lot will allow Lot 1-C-4, an infill lot, to be graded in a manner which conforms to adjacent lots and allows discharge of runoff by surface flow. The combined runoff from Lots 1-C-3 and 1-C-4 will be discharged into Alamo Avenue S.E. via the existing driveway. Alamo Avenue S.E. contains a public storm drain system which accepts runoff within the street and conveys that runoff to a downstream public drainage channel. This channel ultimately discharges to the A.M.A.F.C.A. South Diversion Channel.

The calculations which appear hereon analyze both the existing and developed conditions for the 100-year, 6-hour rainfall event. The peak discharge of runoff has been calculated using the Rational Method while the SCS Method has been used to quantify the volume of runoff generated. Both Methods have been used in accordance with the City of Albuquerque Development Process Manual Volume II, coupled with the Mayor's Emergency Rule adopted January 14, 1986. Based upon the proximity of downstream improvements and negligible impact on downstream conditions, the free discharge of runoff as outlined above is appropriate.

Ground Cover Information

From SCS Bernalillo County Soil Survey, Plate 31: Cu - Cut and fill land
Hydrologic Soil Group: A
Existing Pervious CN = 54 (DPM Plate 22.2 C-2)
Pasture or Range Land: fair condition
Developed Pervious CN = 54 (DPM Plate 22.2 C-2)

Time of Concentration/Time to Peak

$T_c = 0.0078 (10.77 / 50.385)$ (Kirpich Equation)
 $T_p = T_c = 10$ min.

Point Rainfall

$P_6 = 2.3$ in. (DPM Plate 22.2 D-1)

Rational Method

Discharge: $Q = CIA$
Where C varies:
 $P_6 = 6.84 (T_c - 0.51 + 4.85 \ln/hr)$
 $P_6 = 2.3$ in. (DPM Plate 22.2 D-1)
 $T_c = 10$ min (minimum)
 $A =$ area, acres

SCS Method

Volume: $V = 3630 (DRO) A$
Where DRO = Direct runoff in inches
 $A =$ area, acres

Existing Condition

$A_{total} = 29,282$ sf = 0.67 ac
Roof area = 3,050 sf (0.10)
Paved area = 15,945 sf (0.55)
Landscaped area = 10,287 sf (0.35)
 $C = 0.75$ (Weighted average per Emergency Rule, 1/14/86)
 $Q_{100} = CIA = 0.75 (4.86) (0.67) = 2.4$ cfs
 $A_{imp} = 18,995$ sf; % impervious = 65 %
Composite CN = 83 (DPM Plate 22.2 C-2)
DRO = 0.9 in (DPM Plate 22.2 C-4)
 $V_{100} = 3630 (DRO) A = 2,190$ cf

Developed Condition

$A_{total} = 29,282$ sf = 0.67 ac
Roof area = 3,050 sf (0.10)
Paved area = 17,640 sf (0.61)
Landscaped area = 8,592 sf (0.29)
 $C = 0.73$ (Weighted average per Emergency Rule, 1/14/86)
 $Q_{100} = CIA = 0.73 (4.86) (0.67) = 2.6$ cfs
 $A_{imp} = 20,690$ sf; % impervious = 71 %
Composite CN = 84 (DPM Plate 22.2 C-2)
DRO = 0.95 in (DPM Plate 22.2 C-4)
 $V_{100} = 3630 (DRO) A = 2,310$ cf

Comparison (Onsite Flows)

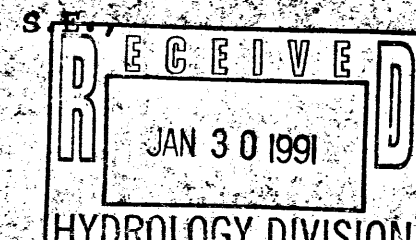
$Q_{100} = 2.6 - 2.4 = 0.2$ cfs
 $V_{100} = 2,310 - 2,190 = 120$ cf

Offsite Flows (See revised plan M16/D28)

$A_{total} = 25,770$ sf = 0.62 ac
Roof area = 0 sf (-0)
Paved area = 24,370 sf (0.91)
Landscaped area = 2,400 sf (0.09)
 $C = 0.82$ (Weighted average per Emergency Rule, 1/14/86)
 $Q_{100} = CIA = 0.82 (4.86) (0.62) = 2.7$ cfs

Combined Flows

Developed condition flows discharged into Alamo Avenue S.E.
 $Q_{100} = 2.7 + 2.6 = 5.3$ cfs



JEFF MORTENSEN & ASSOCIATES, INC.
6010-B MIDWAY PARK BLVD. N.E.
ALBUQUERQUE, N.M. 87109
ENGINEERS (505) 345-4250

GRADING & DRAINAGE PLAN
ALAMO RENT-A-CAR - ALAMO AVENUE S.E.

NO.	DATE	BY	REVISIONS	JOB NO.
1	12/90	JGM	REVISE PAVING LIMITS AND GRADES	900525
2	01/91	JGM	AS-BUILT	
DESIGNED BY	J.G.M.			
DRAWN BY	S.G.H.			
APPROVED BY	J.G.M.			
				DATE 9-1990
				SHEET 1 OF 1